NEW RIVER @ THE INTERNATIONAL BOUNDARY - CALEXICO, CALIFORNIA WATER ANALYSIS

Date Sampled: 3/24/99

Sampling Team: Jose L. Angel and Summer Bundy

Time	Flow ¹	Temp ²	pH ²	Dissol. ²	Specific ² Cond.	Settlea	able Solids ²	² - ml/l
Tille	cfs	°C	рп	Oxygen mg/l	μmhos/cm	10 min.	30 min.	60 min.
0700	293	18.4	7.4	0.0	2149	0.2	0.2	0.2
0800	292	18.5	7.7	0.0	2240	<0.1	<0.1	<0.1
0900	294	18.8	7.5	0.0	2310	0.2	0.2	0.2
1000	298	19.1	7.4	0.0	2100	0.1	0.2	0.2
1100	298	19.5	7.4	0.0	2170	1.0	1.2	1.2
1200	298	19.9	7.4	0.0	2250	0.1	0.2	0.2
1300	298	20.3	7.4	0.0	2120	0.2	0.2	0.3
1400	298	20.8	7.4	0.0	2200	0.1	0.1	0.2
Avg. ³	296	19.4	7.4	0.0	2192	0.1	0.1	0.2
Avg. ⁴	228	21.5	7.5	0.8	3233	0.2	0.2	0.3
Max. ⁵	344	32.4	8.2	4.3	4310	1.1	1.8	2.0
Min. ⁵	183	11.3	6.8	0.0	1500	<0.1	0.1	0.1

Observations:

0700 - Air temp is $18\,^{\circ}$ C. Sunny, no wind. Water color is gray/green. There is quite a bit of foam on the New River's surface. Mild septic odor.

0800 - Air temp is 26 °C. More foam than above. Large foam chunks cover most of the surface.

Specific conductance (SC) probe readings are fluctuating between 200 and 2600 μ mhos/cm.

0900 - Air temp is 29 $^{\circ}$ C. There's much less foam than before. Slight wind (N ~ 2 mph).

SC probe readings are fluctuating between 90 ~ 1900 μmhos/cm.

1000 - Air temp is 30 °C. Very little foam. Mild septic odor.

1100 - Air temp is 31 °C. No foam. River's watercolor is grey/green.

1200 - Air temp is 31 $^{\circ}$ C.

1300 - Air temp is 32 °C.

1400 - Air temp is 28 °C.

Reported by Imperial Irrigation District

² Data Collected in field; temp, pH, DO, and spec. cond. measured with multi-parameter hydrolab instrument.

³ Average of above data

⁴ Average of data for past 12 months

⁵ Maximum and minimum values for the past 12 months.

NEW RIVER @ THE INTERNATIONAL BOUNDARY - CALEXICO, CALIFORNIA WATER ANALYSIS

Date Sampled: 3/24/99

Sampling Team: Rich Howe and Kola Olatunbosun

Time	Flow ¹	Temp ²	pH ²	Dissol. ²	Specific ² Cond.	Settleable Solids ² - ml/l					
Tillic	cfs	°C	рп	Oxygen mg/l	μmhos/cm	10 min.	30 min.	60 min.			
1500	298	21.1	7.4	0.0	2210	0.1	0.2	0.2			
1600	298	21.2	7.4	0.0	2180	0.1	0.2	0.2			
1700	298	21.3	7.0	0.0	2832	0.1	0.2	0.2			
1800	300	21.3	7.3	0.0	2200	0.2	0.2	0.3			
1900	299	21.1	7.4	0.0	1760	0.1	0.1	0.2			
2000	297	20.9	7.4	0.0	2120	0.2	0.2	0.2			
2100	295	20.5	7.4	0.0	2190	0.1	0.2	0.2			
2200	294	20.5	7.4	0.0	1800	0.1	0.2	0.2			
Avg. ³	297	21.0	7.3	0.0	2162	0.1	0.2	0.2			

Observations:

1430 - Sunny, slight wind. New River's watercolor is brown/green.

1500 - Air temp is 29.5 °C. Considerable amount of floating solids and materials (i.e. human wastes)

1600 - Air temp is 27 °C. River's watercolor is brown/green. Lots of foam. River is emanating a strong hydrogen sulfide odor.

1700 - Air temp is 25 °C. River's watercolor is dark brown/green. Installed 6 new batteries in Hydrolab.

1800 - Air temp is 22 °C. Water is darker than before. There is a constant flow of foam.

1900 - Air temp is 21 °C.

2000 - River's watercolor is taupe. SC probe readings are fluctuating between 1710 and 2120 μmhos/cm.

2100 - Air temp is 16 $^{\circ}$ C. Color remains unchanged. The hydrogen sulfide odor is stronger than before.

2200 - No changes.

¹ Reported by Imperial Irrigation District

² Data Collected in field; temp, pH, DO, and spec. cond. measured with multi-parameter hydrolab instrument.

³ Average of above data

NEW RIVER @ THE INTERNATIONAL BOUNDARY - CALEXICO, CALIFORNIA WATER ANALYSIS

Date Sampled: 3/24-3/25/99

Sampling Team: Danny McClure and Rafael Molina

Time	Flow ¹	Temp ²	pH ²	Dissol. ²	Specific ² Cond.	Settleable Solids ² - ml/l				
Tillie	cfs	°C	рп	Oxygen mg/l	μmhos/cm	10 min.	30 min.	60 min.		
2300	293	20.6	7.4	0.0	1740	0.1	0.3	0.3		
0000	292	20.4	7.4	0.0	1760	0.1	0.2	0.2		
0100	290	20.3	7.4	0.0	1820	0.1	0.2	0.3		
0200	286	20.3	7.4	0.0	1720	<0.1	<0.1	<0.1		
0300	285	20.1	7.4	0.0	1600	<0.1	0.1	0.2		
0400	283	19.9	7.5	0.0	1760	0.1	0.1	0.2		
0500	282	19.5	7.4	0.0	1810	0.2	0.2	0.2		
0600	280	19.4	7.4	0.0	2245			-		
Avg. ³	286	20.1	7.4	0.0	1807	0.1	0.2	0.2		

Observations:

2300 - Air temp is 13 °C. Considerable amount of foam. There is a slight breeze (NW < 5 mph).

0000 - No changes.

0100 - Air temp is 11 °C.

0200 - Air temp is 10 $^{\circ}$ C.

0300 - Air temp is 10 °C.

0400 - Air temp is 10 $^{\circ}$ C.

0500 - Air temp is 11 $^{\circ}$ C. The sun has begun to rise.

0600 - Air temp is 13 $^{\circ}$ C. River's watercolor is gray/green.

Reported by Imperial Irrigation District

 $^{^{2}\,\,}$ Data Collected in field; temp, pH, DO, and spec. cond. measured with multi-parameter hydrolab instrument.

³ Average of above data

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

COLORADO RIVER BASIN REGION

Date Sampled: 3/24-3/25/99

Laboratory: California Department of Health Services, Los Angeles, CA

Constituent	Storet Code	US EPA Method	Reporting Limits	Results ¹ (8-hr Comp.)	Results ² (24-hr Comp.)	Ave. ³	Max. ³	Min. ³	Units
MBAS	38260	425.1	0.025	0.913	1.261	0.86	2.08	0.086	mg/l
Total Phosphate as P	665	365.2	0.01	1.16	1.24	1.77	2.36	1.16	mg/l
Phenol	32730	420.1	0.002	0.036	0.009	0.013	0.036	ND	mg/l
Cyanide	720	335.2	0.01	0.01	ND	0.00	0.02	ND	mg/l
Ammonia - Nitrogen (NH ₃ -N)	610	350.2	0.05	5.7	5.9	5.4	8.5	2.9	mg/l
Nitrate - Nitrogen (NO ₃ -N)	610	353.2	0.2	0.4	0.2	0.3	1.3	ND	mg/l
Nitrite - Nitrogen (NO ₂ -N)	610	353.2	0.03	0.04	0.07	0.03	0.1	ND	mg/l
Hardness (as CaCO ₃)	900	353.2	1	850	850	789	935	670	mg/l
Total Alkalinity (as CaCO ₃)	410	310.1	1	270	270	278	305	261	mg/l
Total Filter. Residue (TDS)	70300	160.1	10	2630	2670	2580	3160	2190	mg/l
Total Suspended Solids	530	160.2	10	33	45	68	233	14	mg/l
Turbidity	82079	180.1	0.1	12	12	15	27	10.7	NTU
BOD ₅ @ 20°C	310	405.1	2	24	34	18	28	8	mg/l
COD	340	410.4	5	34	27	38	66	20	mg/l

Constituent	Storet Code	Method	Reportir	ng Limits	Results ¹	Results ²	Ave.3	Max. ³	Min. ³	Units
Constituent	Storet Code	Wethou	Graphite	Flame	(8-hr Comp.)	(24-hr Comp.)	Ave.	wax.	win.	Ullits
As-Arsenic	1002	A.A.	2	-	6	5	5	7	ND	μg/l
Cd-Cadmium	1027	A.A.	1	-	ND	ND	ND	ND	ND	μg/l
Cr-Chromium	1034	A.A.	10	-	ND	ND	ND	ND	ND	μg/l
Cu-Copper	1042	A.A.	10	-	ND	ND	ND	ND	ND	μg/l
Pb-Lead	1051	A.A.	10	=	ND	ND	1	10	ND	μg/l
Se-Selenium	1147	A.A.	5	-	ND	ND	ND	ND	ND	μg/l
Zn-Zinc	1092	EPA-212.3	-	50	ND	ND	7	78	ND	μg/l
Hg-Mercury	71900	EPA-245.1	1	=	ND	ND	ND	ND	ND	μg/l

Laboratory: ATS Laboratories, Brawley, CA

Fecal Coliform ^{4,5}	Storet Code	Results	Median ³	Max. ³	Min. ³	Units
1100 (3/24)	316315	1,100,000	300,000	1,700,000	110,000	MPN/100ml
1200	316315	700,000	300,000	800,000	40,000	MPN/100ml
1300	316315	2,400,000	265,000	2,400,000	110,000	MPN/100ml
0300 (3/25)	316315	1,100,000	-	-	-	MPN/100ml
0400	316315	800,000	-	-	-	MPN/100ml
0500	316315	500,000	-	-	-	MPN/100ml
0600	316315	3,000,000	-	-	-	MPN/100ml

 $^{^{\}rm 1}$ Resutls are from the 8-hr composite sample collected on 3/24/99 from 0700-1400.

ND = Not Detected

 $^{^2 \ \ \}text{Results are from the 24-hr composite sample collected on 3/24-3/25/99 from 0700-0600, and are not included in any calculations.}$

 $^{^{\}rm 3}\,$ Ave, median, max, & min values for the past 12 months

⁴ Grab sample taken at the indicated time

 $^{^{\}rm 5}\,$ Analyzed by the Multiple Tube Fermentation Method

NEW RIVER @ THE INTERNATIONAL BOUNDARY - CALEXICO, CALIFORNIA WATER ANALYSIS

Date Sampled: 3/24-3/25/99

Laboratory: California Department of Health Services

Analyte ¹	Storet Code	3/24/99 0900 ²	3/24/99 1200 ²	3/24/99 1500 ²	3/24/99 1800 ²	3/24/99 2100 ²	3/25/99 0000 ²	3/25/99 0300 ²	3/25/99 0600 ²	Detection Limits	Units
Benzene	34030	ND	0.5	μg/l							
Bromobenzene	81555	ND	0.5	μg/l							
Bromochloromethane	A-012	ND	0.5	μg/l							
Bromodichloromethane	32101	ND	0.5	μg/l							
Bromoform	32104	ND	0.5	μg/l							
Bromomethane (Mehyl Bromide)	34413	ND	0.5	μg/l							
n-Butylbenzene	A-010	ND	0.5	μg/l							
sec-Butylbenzene	77350	ND	0.5	μg/l							
tert-Butylbenzene	77353	ND	0.5	μg/l							
Carbon Tetrachloride	32102	ND	0.5	μg/l							
Chlorobenzene (Monochlorobenzene)	34301	ND	0.5	μg/l							
Chloroethane	34311	ND	0.5	μg/l							
Chloroform	32106	ND	ND	ND	0.61	0.57	0.53	0.69	ND	0.5	μg/l
Chloromethane (Methyl Chloride)	34418	ND	0.5	μg/l							
o-Chlorotoluene (2-Chlorotolulene)	A-008	ND	0.5	μg/l							
p-Chlorotoluene (4-Chlorotolulene)	A-009	ND	0.5	μg/l							
Dibromochloromenhane	32105	ND	0.5	μg/l							
Dibromomethane	77596	ND	0.5	μg/l							
1,2-Dichlorobenzene (o-DCB)	34536	ND	ND	ND	ND	1.1	ND	ND	ND	0.5	μg/l
1,3-Dichlorobenzene (m-DCB)	34566	ND	0.5	μg/l							
1,4-Dichlorobenzene (p-DCB)	34571	0.52	0.50	0.60	0.87	1.0	0.77	0.62	0.54	0.5	μg/l
Dichlorodifluoromethane (Freon 12)	34668	ND	0.5	μg/l							

NEW RIVER @ THE INTERNATIONAL BOUNDARY - CALEXICO, CALIFORNIA WATER ANALYSIS

Date Sampled: 3/24-3/25/99

Laboratory: California Department of Health Services

A., al. 4a1	Staret Code	3/24/99	3/24/99	3/24/99	3/24/99	3/24/99	3/25/99	3/25/99	3/25/99	Detection	Units
Analyte ¹	Storet Code	0900 ²	1200 ²	1500 ²	1800 ²	2100 ²	0000 ²	0300 ²	0600 ²	Limits	Units
1,1-Dichloroethane (1,1-DCA)	34496	ND	0.5	μg/l							
1,2-Dichloroethane (1,2-DCA)	34531	ND	0.5	μg/l							
1,1-Dichloroethylene (1,1-DCE)	34501	ND	0.5	μg/l							
cis-1,2-Dichloroethylene	77093	ND	0.5	μg/l							
trans-1,2-Dichloroethylene	34546	ND	0.5	μg/l							
1,2-Dichloropropane	34541	ND	0.5	μg/l							
1,3-Dichloropropane	77173	ND	0.5	μg/l							
1,2-Dichloropropane	77170	ND	0.5	μg/l							
1,1-Dichloropropylene	77168	ND	0.5	μg/l							
cis- & trans-1,3-Dichloropropylene	34561	ND	0.5	μg/l							
Ethyl benzene	34371	ND	0.5	μg/l							
Ethylene dibromide (EDB)	77651	ND	0.5	μg/l							
Hexachlorobutadiene	34391	ND	0.5	μg/l							
Isopropylbenzene (Cumeme 77356)	77223	ND	0.5	μg/l							
p-Isopropyltoluene (p-Cymene)	A-011	ND	ND	ND	0.52	ND	ND	ND	ND	0.5	μg/l
Methylene chloride (Dichloromethane)	34423	ND	0.5	μg/l							
Methyl Ethyl Ketone	81595	ND	0.5	μg/l							
Methyl Isobutyl Ketone	81596	ND	0.5	μg/l							
Methyl tert-Butyl Ether (MTBE)	A-030	ND	0.5	μg/l							
Napthalene	34696	ND	0.5	μg/l							
n-Propylbenzene	77224	ND	0.5	μg/l							
Styrene	77128	ND	0.5	μg/l							

NEW RIVER @ THE INTERNATIONAL BOUNDARY - CALEXICO, CALIFORNIA WATER ANALYSIS

Date Sampled: 3/24-3/25/99

Laboratory: California Department of Health Services

Analyte ¹	Storet Code	3/24/99 0900 ²	3/24/99 1200 ²	3/24/99 1500 ²	3/24/99 1800 ²	3/24/99 2100 ²	3/25/99 0000 ²	3/25/99 0300 ²	3/25/99 0600 ²	Detection Limits	Units
1,1,1,2-Tetrachloroethane	77562	ND	0.5	μg/l							
1,1,2,2-Tetrachloroethane	34516	ND	0.5	μg/l							
Tetrachloroethylene (PCE)	34475	ND	0.5	μg/l							
Toluene	34010	ND	ND	0.70	1.9	1.4	0.82	0.66	ND	0.5	μg/l
1,2,3-Trichlorobenzene	77613	ND	0.5	μg/l							
1,2,4-Trichlorobenzene	34551	ND	0.5	μg/l							
1,1,1-Trichloroethane (1,1,1-TCA)	34506	ND	0.5	μg/l							
1,1,2-Trichloroethane (1,1,2-TCA)	34511	ND	0.5	μg/l							
Trichloroethylene (TCE)	39180	ND	0.5	μg/l							
1,2,3-Trichloropropane	77443	ND	0.5	μg/l							
Trichlorofluoromethane (Freon 11)	34488	ND	0.5	μg/l							
1,2,4-Trimethylbenzene	77222	ND	0.5	μg/l							
1,3,5-Trimethylbenzene	77226	ND	0.5	μg/l							
1,1,2-Trichloro-trifluoroethane (Freon 113)	81611	ND	0.5	μg/l							
Vinyl chloride (VC)	39175	ND	0.5	μg/l							
m,p-Xylenes	A-014	ND	ND	0.56	0.62	ND	ND	ND	ND	0.5	μg/l
o-Xylene	77135	ND	0.5	μg/l							

ND = Not Detected

¹ USEPA Method 524.2

² Results are for each grab sample collected at the specified time/date, the first sample was collected @ 0900 on 3/24/99. The last was collected @ 0600 on 3/25/99.